

Wastelines

N.H. Governor's Award for Pollution Prevention



There is still time to submit your application for the Annual Governor's Award for Pollution Prevention! The application is due to NHPPP by January 24.

NHPPP recognizes and rewards

businesses and organizations that have successfully reduced or eliminated waste at their source. If your business or organization has been working to eliminate a waste, reduce water usage or conserve energy, or has created an Environmental Management System or become ISO 14001 certified, NHPPP invites you to apply

for the Award. All Award winners must be in good standing with state and federal environmental regulations. Award recipients must also agree to allow a summary of their accomplishments to be published by NHPPP.

Visit our web site at

www.des.state.nh.us/nhPPP/nh01003.htm for an application, to view an example application, past Award winners and frequently asked questions.

Contact Colleen Schwalbe at (603) 271-0878 or email cschwalbe@des.state.nh.us for more information on this program.

Mark Your Calendar! April 21, Pollution Prevention Conference

"Pollution Prevention: A Tool for Today's Economy"

The Annual Pollution Prevention Conference is shaping up to be a day filled with interesting speakers, case studies, and useful conservation measures for businesses and organizations. The conference will be held at the New England Center, Durham NH. Session topics this year include *Greening the Supply Chain*, *Water Conservation for Businesses*, *Capturing the Multiple Benefits of Energy Efficiency*, and *Enhancing Site Security in Today's Changing World*. Register online now at www.unh.learn.edu. The cost of registration (includes lunch) is \$75.



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NHPPP Answers Your Environmental Questions

If you have an environmental question you would like to see answered, please email cschwalbe@des.state.nh.us.

I'm concerned about our requirements to meet the EPA's Storm Water Phase II deadline of March 10. What should I have submitted to EPA by this date?

By March 10, the EPA's Storm Water Phase II Final Rule requires affected towns and businesses to file either a Notice of Intent (NOI) to obtain a permit, or a Certificate of No Exposure (NEC). Phase II regulates small municipal separate storm sewer systems (MS4) discharges in urban areas located in 45 NH municipalities, storm water discharges associated with small construction activities, and municipally owned industrial activities that were exempted from regulation during Phase I.

Although this is a federal (EPA) as opposed to a state (DES) permit, DES is working to assist affected businesses and municipalities in meeting their requirements. The EPA Region 1 Storm Water Coordinator is Thelma Murphy, who may be reached at (617) 918-1615; at DES, you can call Jeff Andrews, at (603) 271-2984. The DES public information and permitting office (603) 271-2975 has copies of NOIs and NECs, guidance documents on preparing storm water pollution prevention plans and how to sample storm water. DES fact sheets can be found at www.des.state.nh.us/openme.htm.

Effective January 1 State Law Prohibits RESIDENTIAL TRASH BURNING

Today's trash contains inks, dyes, chlorine, plastics, metals and a variety of synthetic materials that can produce toxins when burned, especially at low-level temperatures and low oxygen levels. According to a recent U.S. Environmental Protection Agency study, burning a week's worth of trash from a single household in an open barrel can emit the same amount of toxic chemicals (such as dioxins and furans) as a well-controlled municipal incinerator burning trash from thousand of homes.

Effective January 1, 2003, RSA 125-N prohibits the "residential burning of combustible domestic waste." The New Hampshire ban prohibits burning materials such as household trash, packaging materials, coated

or treated cardboard, oily rags and animal, vegetable, or kitchen waste. This ban does not include outdoor burning of clean wood, leaves and small brush, campfire wood, and charcoal. These materials can still be burned with a permit from the local fire warden.



For more information on issues related to residential trash burning, please contact Rick Rumba, DES Air Toxics Program Manager, at (603) 271-1987 or 800-498-6868, or visit www.des.state.nh.us/ard/noTrashBurning.htm.

Pollution Prevention Interns: A Partnership Worth Having

The Pollution Prevention Intern Partnership between the University of New Hampshire (UNH) Chemical Engineering students and New England businesses and organizations has saved money (over \$2.8 million) over time and reduced waste. The internship program places engineering students with companies to work on pollution prevention projects for a ten-week period during the student's summer break.

A \$5,000 fee covers an intern-training program at UNH, a stipend for the ten-week placement, intern support activities, and UNH/DES intern oversight during the project period. Sharing an intern with another business or organization is an option. To sponsor or co-sponsor a summer intern, or to learn more about the program, please contact Dr. Ihab Farag (603) 862-2313, or email ihab.farag@unh.edu.



Front row, left to right: Dr. Ihab Farag (UNH P2 Program Coordinator), Len Wallace (EPA Region 1), Eric Couture (P2 Intern), Caitlin LaClair (P2 Intern), Kim Garrison (P2 Intern), Linda Darveau, (EPA Region 1). Back row, left to right: Paul Lockwood (DES), Colleen Schwalbe (DES), Razvan Popescu, (P2 Intern), Justin Warrington (P2 Intern), Christopher Barrett (P2 Intern), Sara Johnson (DES), Dwight Peavey (EPA Region 1).

Ms. Jacqueline Beaman, Manager of Environmental and Safety Affairs at Portex (Keene NH) had this to say about their P2 intern Eric Couture:

"The Portex ISO 14001 team, on a number of occasions, commended Eric for his knowledge,

willingness to help, thoroughness, and competency. He was particularly impressive in his ability to contribute during team meetings. Eric successfully originated his own approach to his project within a short period of time and delivered useful results."

New Technology Eliminates Dental X-Ray Wastes

By: Paul Lockwood, DES P2 and Education Supervisor



Digital radiography is becoming an increasingly popular method of producing dental images because it offers numerous advantages over conventional film and film processing. Compared to “old fashioned” X-ray photographs, digital imaging eliminates the wait for processing, it eliminates as much as 90% of the radiation exposure, it offers far better imaging and diagnostic capabilities and, best of all, it completely eliminates the generation of hazardous wastes from photographic developing. With recent advances in digital imaging, the disadvantages are now mostly associated with the initial cost of hardware and software needed to capture and process the images.

Digital radiographs come in two formats: Charged Couple Devices (CCD) that attach by a thin cable to a computer; and, Storage Phosphor Devices that consist of reusable digital film. Both formats resemble a standard bitewing film in appearance and use. CCDs are rigid, however, and their use requires some training. The advantage to CCDs is that they offer instantaneous images on a computer screen while the CDD is still in the patient’s mouth. Storage Phosphors Devices are flexible and store the adsorbed X-radiation in a “halogenide” layer that is read by the computer after removal from the patient’s mouth. The advantage to Storage Phosphors is that they are similar to standard x-ray film plates and require no special training to use. Their disadvantage is that they require a one to two minute scan by the computer to view the image.

Once the image is created using either format, a digital image may be enlarged, cropped and

manipulated for darkness and contrast to enhance the quality of the information it provides. This is a considerable advantage over “fixed” photographic pictures because difficult to see structures and problems may be enhanced and more easily observed even after the image has been taken and “developed.” Another major benefit to digital radiography is that, while using the same x-ray equipment as for old photographic images, digital images only require 1/10 the radiation. This better protects the patient as well as office staff who routinely uses x-ray equipment.

Perhaps the best advantage of digital radiography is that digital imaging completely eliminates the chemical film development process. Elimination of film development means a dentist no longer needs to purchase and store hazardous chemicals and no longer needs to manage and dispose of the hazardous wastes resulting from chemical film development. This results in both cost savings and the elimination of associated regulatory requirements. Although digital hardware purchase costs are in the \$5,000 to \$8,000 range, these costs are quickly dropping. Most offices may utilize their existing x-ray and computer equipment, and converting to digital imaging takes very little training. Digital imaging is pollution prevention in its purest sense; it provides a better product, better protects the environment and results in improved working conditions. For more information, please contact Paul Lockwood at (603) 271-2956, or email plockwood@des.state.nh.us.



P2 Library Listings

NH DES Guidebook for Environmental Permits. October 2002.

<http://www.des.state.nh.us/PermitGuide/>

New Hampshire Environment 2001. October 2002.

<http://www.des.state.nh.us/pdf/nhenvironment01.pdf>

NH DES Solid Waste Plan, 2002.

<http://www.des.state.nh.us/SWPlan/>

These publications are also available in hard copy from the DES Public Information Center at (603) 271-2975.

EPA Persistence, Bioaccumulative, and Toxic (PBT) Profiler. <http://www.pbtprofiler.net/>.

Waste Reduction at the Office

Waste reduction at the office consists of small changes whose cumulative effect can make a big difference. With a little thought, you can apply pollution prevention strategies to any “process” that generates waste, whether it’s making a cup of coffee or writing a memo to your co-workers. Here is a short list of pollution prevention ideas for the office, just to get you started.



- Bring in a reusable bag for your lunch; reuse plastic containers for your food items.
- Do not buy note pads – cut up scrap paper from the recycling bin.
- Create one memo with a circulation list on it. Few things are more wasteful than several employees working within a few feet of each other receiving individual copies of the same memo.
- Better than paper, use electronics! Use email, electronic bulletin boards, list serves, etc. Why just reduce paper use when you can eliminate it?
- Keep a central office file instead of having employees keep individual folders.
- Save large envelopes for reuse when mailing – just cover the original name and address with sticky labels.

- Save your toner cartridge for recycling – all cartridges can be recycled regardless of the manufacturer. Also, consider purchasing remanufactured toner cartridges.
- Ask suppliers to package products in reused packaging such as newspaper. Better yet, ask if the product can be delivered with no packaging.
- Do not accept junk mail, such as large catalogs. Call the sender’s toll-free ordering number to remove your name from the list. Return the material with a large “did not request, return to sender” on it; they’ll get the message.
- Photocopy on both sides of the paper; 62 percent of office waste is paper.
- Be creative! Look for a way to reuse or recycle an item before you throw it out!



New Hampshire Department of Environmental Services
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Concord, New Hampshire 03301

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Calendar of Events

March 12-15

NE Sustainable Energy Association
Building Energy and Trade Show
Boston MA www.nesea.org/buildings/be/

March 30-31

Toxics Use and Reduction Institute
Green Chemistry Conference
Email: Anne Basanese@uml.edu

April 8-11

National Pollution Prevention Roundtable
Spring Conference
Louisville KY www.p2.org

April 16 & 17

N.H. Safety Council Annual Conference
Manchester NH
Contact: Jack Edwards (603) 229-3395
www.shcnh.org/conference.html

April 21

Eleventh Annual P2 Conference
New England Center, Durham NH
www.learn.unh.edu/pollution/index.html

Wastelines is published by the

NEW HAMPSHIRE POLLUTION PREVENTION PROGRAM

For a free subscription, call, write, or e-mail

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The New Hampshire Pollution Prevention Program (NHPPP) is a free, confidential, non-regulatory technical and compliance assistance program for New Hampshire businesses and others. The NHPPP maintains an information clearinghouse, conducts on-site pollution prevention opportunity assessments, provides pollution prevention planning assistance, and organizes conferences and workshops.



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